REMARKS

The application is believed to be in condition for allowance because the claims are novel and non-obvious over the cited art. The following paragraphs provide the justification for these beliefs. In view of the following reasoning for allowance, the applicants hereby respectfully request further examination and reconsideration of the subject application.

The 35 USC 103 Rejection of 1, 2, 9-12, 14-17, 19-21 and 55-61.

Claims 1, 2, 9-12, 14-17, 19-21 and 55-61 were rejected under 35 USC 103(a) as being unpatentable over Konopka et al, U.S. Patent No. 5,850,250, herein after referred to as Konopka, in view of Tai et al. (U.S. Patent No. 6,577,333) (herein after referred to as Tai) and in further view of Taylor, U.S. Patent No. 7,113,201(herein after Taylor). The Office Action stated that Konopka and Taylor teach the applicants' claimed invention, but do not teach the applicants' claimed virtual director or that the server also captures the sub-events in addition to broadcasting the captured sub-events. However, the Examiner further contended that Taylor teaches this feature, rendering the applicants' claimed invention obvious. The applicants respectfully traverse this contention of obviousness.

In order to deem the applicants' claimed invention unpatentable under 35 USC 103, a prima facie showing of obviousness must be made. To make a prima facie showing of obviousness, all of the claimed elements of an applicant's invention must be considered, especially when they are missing from the prior art. If a claimed element is not taught in the prior art and has advantages not appreciated by the prior art, then no prima facie case of obviousness exists. The Federal Circuit court has stated that it was error not to distinguish claims over a combination of prior art references where a material limitation in the claimed system and its purpose was not taught therein (*In Re Fine*, 837 F.2d 107, 5 USPQ2d 1596 (Fed. Cir. 1988)).

The applicants claim...

"An automated system for capturing and viewing an event having event participants, comprising:

multiple cameras of different types simultaneously capturing images of sub-events occurring in a space associated with an event, wherein the multiple cameras of different types are atleast two of:

a 360-degree camera centrally positioned to monitor in substantially 360-degrees the space in which the event occurs;

a remote view camera positioned so as to capture a view of event participants in said space associated with said event to be transmitted to a client over said network;

a presenter view camera positioned so as to capture a view of an overview of the space associated with the event wherein a presenter would typically be presenting; and

a whiteboard capture camera positioned so as to capture strokes written on a whiteboard;

a virtual director that automatically determines which view of said multiple cameras of different types to display, wherein said virtual director determines which camera view to display by:

determining if a person is speaking and facing toward a display that displays at least one remote event participant, and if so using a camera view captured by said remote camera to display;

determining if a person is talking and the presenter view camera can track them and provide a higher resolution image than the 360-degree camera, and if so using a camera view captured by said presenter view camera for display; and

else, using a camera view captured by said 360-degree camera to display;

a server capable of recording and broadcasting the captured sub-events; and

one or more clients in network connection with said server that view portions of the captured event." (emphasis added)

And,

A system for conducting a distributed meeting, the system comprising:

a 360-degree camera for capturing images of meeting participants in a meeting in substantially 360 degrees about said 360-degree camera;

a whiteboard camera for capturing images of contents written on a whiteboard;

a presenter camera for capturing images of an overview of the meeting room in the area where a presenter would typically be presenting;

a microphone array for capturing the audio of the meeting that is synchronized with one of said images captured by said 360-degree camera, whiteboard camera or presenter camera; and

a virtual director that automatically determines which view of said 360 degree camera, whiteboard camera or presenter camera to display and switches to the determined view of the associated camera to display a view of one of said different sub-events, wherein said virtual director determines which camera view to display by:

determining if a person is talking and the presenter view camera can track them and provide a higher resolution image than the 360-degree camera, and if so using a camera view captured by said presenter view camera for display; and

else, using a camera view captured by said 360-degree camera to display; and

a meeting server for performing processing required to broadcast and record meeting data." (emphasis added)

And,

"An automated system for capturing and viewing an event having event participants, comprising:

multiple cameras of different types simultaneously capturing images of different sub-events occurring in a space associated with an event;

an event server, that processes in substantially real time said event data;

an event post processor that process said event data only when the event is completed;

a virtual director that automatically determines which of said multiple cameras of different types to display based on the position of a person speaking and the ability to track a person speaking in the captured images and audio signals received and switches between said multiple cameras of different types to display a view of one of said different sub-events; and

at least one event client in connection with said event server wherein said event client allows viewing live events and archived events." (emphasis added)

And,

"A computer-readable medium having computer-executable instructions for viewing a recorded event, said computer-executable instructions comprising:

simultaneously capturing images of different sub-events by of an event with multiple cameras of different types each capturing a different sub-event;

capturing audio associated with the different sub-events;

automatically selecting which of the captured sub-events to transmit based based on the position of a person speaking and the ability to track a person speaking in the captured images of the different sub-events and the captured audio associated with the different sub-events ; and

transmitting the selected captured sub-events and associated audio from a server to one or more clients in network connection with said server." (emphasis added)

And,

"A system for conducting a distributed meeting, the system comprising:

a 360-degree camera for capturing images of meeting participants in a meeting room in substantially 360 degrees about said 360-degree camera, wherein said 360-degree camera includes an integrated computer that

performs processing required to broadcast said images and associated meeting data; and

a whiteboard camera for capturing images of contents written on a whiteboard;

a presenter view camera for capturing images of an overview of the meeting room in a space where a presenter would typically be presenting; and

a virtual director that automatically determines which view of said 360 degree camera, whiteboard view camera and presenter view camera to display based on determining if a person is speaking and is positioned in a certain manner relative to one of the cameras and the ability to track the person speaking." (emphasis added)

In contrast, Konopka discloses a video distance learning system including a teaching classroom connected to remote learning classrooms by a fiber-optic communication network. The teaching classroom includes a rear audio/video cabinet housing four video monitors and a camera. The remote classrooms have front cabinets with four monitors and a camera. In a normal operating mode, one of the video monitors will display the teacher, while the other three monitors display classroom images. A rear video camera mounted is focused on the teacher and a front video camera may be focused on the students. The front video cabinet may have a graphics or document camera is also provided on the front video cabinet. The document camera points downward at a light table to image materials such as books, pictures and overhead transparencies. The teacher may switch between the rear camera, the front camera and the document camera. A teacher's work station, may be located at the front of the teaching classroom. A control panel allows the teacher to control all devices located within the room, such as volume, displays, or focus. The work station may also include a personal computer interfacing with the network to schedule classes. The video distance learning system facilitates eye contact between the teacher in a teaching classroom and students in remote classrooms. **Konopka does not, however, teach the applicants' claimed virtual director that automatically determines which view of the multiple cameras of different types to display based on the positioning of a person speaking and the ability to track the speaker in images captured by the cameras and the associated audio of the person speaking, and automatically switches between**

the multiple cameras of different types to display a view of one of the different sub-events.

Tai teaches a technique for automatically selecting a video output from among several video input sources based strictly on audio signals, **not positioning of a person speaking in an event.** In one method, one or more audio sensors are associated with each video input source. Preferably, an audio sensor is positioned to receive audio signals from directions that receive favorable coverage in the field of view of the associated video source. An autoselector calculates audio scores for each of the audio sensors over short (e.g., 0.5 seconds) examination intervals. At each examination interval, the potential exists for a different video source to be selected as the video output. The autoselector selects a video source based on the audio scores for an examination interval, as well as the recent time-history of video source selection. For instance, if a new video source has just been selected, selection of a different source may be disabled for a few seconds. The time-history is also used to increase the probability that source selection varies in a seemingly-natural manner. (Abstract) However, Tai does not teach **does not, however, teach the applicants' claimed virtual director that automatically determines which view of the multiple cameras of different types to display based on the positioning of a person speaking and the ability to track the speaker in images captured by the cameras and the associated audio of the person speaking, and automatically switches between the multiple cameras of different types to display a view of one of the different sub-events.**

Granted, the Examiner states (with respect to Claim 8 later) that the same virtual director as the applicants claim is taught in Tai in FIGs. 2 and 6, Col. 3, line 26-col. 4, line 8 and Col. 6, line 52-Col. 7, line 17), but these passages make no mention of the positioning of a speaker (person speaking) in images captured by the cameras, *nor do these passages mention the ability to track a speaker in the* images.

Taylor teaches an image processing apparatus where image data from a plurality of cameras capture the movements of a number of people, for example in a meeting, and sound data from a directional microphone array is processed by a computer processing apparatus to archive the data in a meeting archive database. The image data captured is processed to determine the three-dimensional position and orientation of each person's head and to determine at whom each person is looking. The sound data is processed to determine the direction from which the sound came. Processing is carried out to determine who is speaking by determining which person has his head in a position corresponding to the direction from which the sound came. Having determined which person is speaking, the personal speech recognition parameters for that person are selected and used to convert the sound data to text data. Image data to be archived is chosen by selecting the camera which best shows the speaking participant and the participant to whom he is speaking. Image data, sound data, text data and data defining at whom each person is looking is stored in the meeting archive database. (Abstract)

Taylor does not, however, teach the applicants' claimed multiple cameras of different types simultaneously capturing images of sub-events occurring in a space associated with an event. In Taylor all the cameras are of the same type positioned so as to determine the positions of the meeting participants. Nor does Taylor teach does not, however, teach the applicants' claimed virtual director that automatically determines which view of the multiple cameras of different types to display based on the positioning of a person speaking and the ability to track the speaker in images captured by the cameras and the associated audio of the person speaking, and automatically switches between the multiple cameras of different types to display a view of one of the different sub-events. In Taylor only a far view of the speaking meeting participant and to whom they are speaking is recorded. Most of the people speaking will be captured from behind as is evidenced from the positions of the cameras relative to the majority of the meeting partipants (see FIG. 1). No close up frontal views of a speaker can be displayed; no views specifically optimized to be transmitted to a remote participant can be displayed; and no whiteboard camera views can be displayed.

Since neither Konopka nor Tai nor Taylor teaches the applicants' claimed does not, however, teach the applicants' claimed virtual director that automatically determines which view of the multiple cameras of different types to display based on the positioning of a person speaking and the ability to track the speaker in images captured by the cameras and the associated audio of the person speaking, and automatically switches between the multiple cameras of different types to display a view of one of the different sub-events, the combination does not teach it. Thus, the applicants have claimed elements not taught in the cited art and which have advantages not recognized therein. Accordingly, no prima facie case of obviousness has been established in accordance with the holding of *In Re Fine.* This lack of prima facie showing of obviousness means that the rejected claims are patentable under 35 USC 103 over Konopka in view of Tai and in further view of Taylor. It is, therefore, respectfully requested that the rejection of Claims 1, 2, 9-12, 14-17, 19-21 and 55-61 be reconsidered based on the novel and non-obvious exemplary claim language:

> "An automated system for capturing and viewing an event having event participants, comprising:
>
> multiple cameras of different types simultaneously capturing images of sub-events occurring in a space associated with an event, wherein the multiple cameras of different types are atleast two of:
>
> a 360-degree camera centrally positioned to monitor in substantially 360-degrees the space in which the event occurs;
>
> a remote view camera positioned so as to capture a view of event participants in said space associated with said event to be transmitted to a client over said network;
>
> a presenter view camera positioned so as to capture a view of an overview of the space associated with the event wherein a presenter would typically be presenting; and
>
> a whiteboard capture camera positioned so as to capture strokes written on a whiteboard;
>
> **a virtual director that automatically determines which view of said multiple cameras of different types to display, wherein said virtual director determines which camera view to display by:**
>
> **determining if a person is speaking and facing toward a display that displays at least one remote event participant, and if so using a camera view captured by said remote camera to display;**

determining if a person is talking and the presenter view camera can track them and provide a higher resolution image than the 360-degree camera, and if so using a camera view captured by said presenter view camera for display; and

else, using a camera view captured by said 360-degree camera to display;

a server capable of recording and broadcasting the captured sub-events; and

one or more clients in network connection with said server that view portions of the captured event." (emphasis added)

The 35 USC 103 Rejection of 3, 5 and 6.

Claims 3, 5 and 6 were rejected under 35 USC 103(a) as being unpatentable over Konopka in view of Tai, in further view of Taylor and in further view of Ippolito, U.S. Patent No. 6,072,522 (herein after Ippolito). The Examiner stated that Konopka Tai and Taylor teach the applicants' claimed invention, but do not teach cameras placed in a back to back fashion. However, the Examiner further contended that Ippolito teaches this feature, rendering the applicants' claimed invention obvious. The applicants respectfully disagree with this contention of obviousness.

As discussed above, the applicants claim...

"An automated system for capturing and viewing an event having event participants, comprising:

multiple cameras of different types simultaneously capturing images of sub-events occurring in a space associated with an event, wherein the multiple cameras of different types are atleast two of:

a 360-degree camera centrally positioned to monitor in substantially 360-degrees the space in which the event occurs;

a remote view camera positioned so as to capture a view of event participants in said space associated with said event to be transmitted to a client over said network;

a presenter view camera positioned so as to capture a view of an overview of the space associated with the event wherein a presenter would typically be presenting; and

a whiteboard capture camera positioned so as to capture strokes written on a whiteboard;

a virtual director that automatically determines which view of said multiple cameras of different types to display, wherein said virtual director determines which camera view to display by:

determining if a person is speaking and facing toward a display that displays at least one remote event participant, and if so using a camera view captured by said remote camera to display;

determining if a person is talking and the presenter view camera can track them and provide a higher resolution image than the 360-degree camera, and if so using a camera view captured by said presenter view camera for display; and

else, using a camera view captured by said 360-degree camera to display;

a server capable of recording and broadcasting the captured sub-events; and

one or more clients in network connection with said server that view portions of the captured event." (emphasis added)

Neither Konopka, Taylor, Tai nor Ippolito teach the applicants' claimed **multiple cameras of different types simultaneously capturing images of sub-events occurring in a space associated with an event; or a virtual director that determines which view of the multiple cameras of different types to display based on the positioning of a speaker and the ability to track the speaker in captured images, and switches between the multiple cameras of different types to display a view of one of the different sub-events.**

Since neither Konopka, Tai, Taylor nor Ippolito teach the applicants' claimed **multiple cameras of different types simultaneously capturing images of sub-events occurring in a space associated with an event; or a virtual director that automatically determines which view of the multiple cameras of different types to display based on the positioning of a person speaking and the ability to track the speaker in images captured by the cameras, and the associated audio of the person speaking, and automatically switches between the multiple cameras of different types to display a view of one of the different sub-events**, the combination does not teach it. Thus, the applicants have claimed elements not taught in the cited art and which have advantages not recognized therein. Accordingly, no prima facie case of obviousness has been established in accordance with the holding of *In Re Fine*. This lack of prima facie showing of obviousness means that the rejected claims are patentable under 35 USC 103 over Konopka in view of Tai, Taylor and Ippolito. It is, therefore, respectfully requested

that the rejection of Claims 3, 5 and 6 be reconsidered based on the above quoted claim language.

The 35 USC 103 Rejection of 4.

Claim 4 was rejected under 35 USC 103(a) as being unpatentable over Konopka in view of Tai, in further view of Taylor, in further view of Ippolito and in yet further view of Liu et al., U.S. Patent No. 6,839,067 (herein after Liu). The Examiner stated that Konopka, Tai, Ippolito and Taylor teach the applicants' claimed invention, but do not teach a panoramic stitcher for stitching images together. However, the Examiner further contended that Liu teaches this feature, rendering the applicants' claimed invention obvious.The applicants respectfully disagree with this contention of obviousness.

As discussed above, the applicants claim...

"An automated system for capturing and viewing an event having event participants, comprising:

multiple cameras of different types simultaneously capturing images of sub-events occurring in a space associated with an event, wherein the multiple cameras of different types are atleast two of:

a 360-degree camera centrally positioned to monitor in substantially 360-degrees the space in which the event occurs;

a remote view camera positioned so as to capture a view of event participants in said space associated with said event to be transmitted to a client over said network;

a presenter view camera positioned so as to capture a view of an overview of the space associated with the event wherein a presenter would typically be presenting; and

a whiteboard capture camera positioned so as to capture strokes written on a whiteboard;

a virtual director that automatically determines which view of said multiple cameras of different types to display, wherein said virtual director determines which camera view to display by:

determining if a person is speaking and facing toward a display that displays at least one remote event participant, and if so using a camera view captured by said remote camera to display;

determining if a person is talking and the presenter view camera can track them and provide a higher resolution image than the 360-degree camera, and if so using a camera view captured by said presenter view camera for display; and

else, using a camera view captured by said 360-degree camera to display;

a server capable of recording and broadcasting the captured sub-events; and

one or more clients in network connection with said server that view portions of the captured event." (emphasis added)

As discussed above neither Konopka nor Taylor nor Ippolito teach the applicants' claimed multiple cameras of different types simultaneously capturing images of sub-events occurring in a space associated with an event; or **virtual director that automatically determines which view of the multiple cameras of different types to display based on the positioning of a person speaking and the ability to track the speaker in images captured by the cameras and the associated audio of the person speaking, and automatically switches between the multiple cameras of different types to display a view of one of the different sub-events**.

Liu teaches a method and apparatus for providing multi-resolution video to multiple users under hybrid human and automatic control. Initial environment and close-up images are captured using a first camera and a PTZ camera. The initial images are then stored in memory. Current environment and close-up images are captured and then an estimated difference between the initial and current images and the true image is determined. The estimated differences are weighted and compared and the stored images are updated. A close-up image is then provided to each user of the system. The close-up camera is then directed to a portion of the environment image having high distortion, and current environment and close-up images are captured again. (Abstract) However, Liu does not teach the applicants' claimed **multiple cameras of different types simultaneously capturing images of sub-events occurring in a space associated with an event; or virtual director that automatically determines which view of the multiple cameras of different types to display based on the positioning of a person speaking and the ability to track the speaker in images captured by the cameras, and the associated audio of the person speaking, and automatically switches between the**

multiple cameras of different types to display a view of one of the different sub-events.

Since neither Konopka nor Taylor nor Ippolito nor Liu teaches the applicants' claimed teach the applicants' claimed **multiple cameras of different types simultaneously capturing images of sub-events occurring in a space associated with an event where virtual director that automatically determines which view of the multiple cameras of different types to display based on the positioning of a person speaking and the ability to track the speaker in images captured by the cameras, and the associated audio of the person speaking, and automatically switches between the multiple cameras of different types to display a view of one of the different sub-events**, the combination does not teach it. Thus, the applicants have claimed elements not taught in the cited art and which have advantages not recognized therein. Accordingly, no prima facie case of obviousness has been established in accordance with the holding of *In Re Fine*. This lack of prima facie showing of obviousness means that the rejected claims are patentable under 35 USC 103 over Konopka in view of Tai, Ippolito, Taylor and Liu. It is, therefore, respectfully requested that the rejection of Claim 4 be reconsidered based on the above-quoted claim language.

The 35 USC 103 Rejection of 8.

Claim 8 was rejected under 35 USC 103(a) as being unpatentable over Konopka in view of Taylor, in view of Ippolito and in further view of Liu. The Examiner stated that Konopka, Ippolito and Taylor teach the applicants' claimed invention, but do not teach displaying a higher resolution image of a presenter. However, the Examiner further contended that Liu teaches this feature, rendering the applicants' claimed invention obvious.The applicants respectfully disagree with this contention of obviousness.

The limitations of Claim 8 were incorporated into Claim 1, so this rejection is moot. However, with respect to the limitations of Claim 8, as incorporated into Claim 1,

the applicants claim...

"An automated system for capturing and viewing an event having event participants, comprising:

multiple cameras of different types simultaneously capturing images of sub-events occurring in a space associated with an event, wherein the multiple cameras of different types are atleast two of:

a 360-degree camera centrally positioned to monitor in substantially 360-degrees the space in which the event occurs;

a remote view camera positioned so as to capture a view of event participants in said space associated with said event to be transmitted to a client over said network;

a presenter view camera positioned so as to capture a view of an overview of the space associated with the event wherein a presenter would typically be presenting; and

a whiteboard capture camera positioned so as to capture strokes written on a whiteboard;

a virtual director that automatically determines which view of said multiple cameras of different types to display, wherein said virtual director determines which camera view to display by:

determining if a person is speaking and facing toward a display that displays at least one remote event participant, and if so using a camera view captured by said remote camera to display;

determining if a person is talking and the presenter view camera can track them and provide a higher resolution image than the 360-degree camera, and if so using a camera view captured by said presenter view camera for display; and

else, using a camera view captured by said 360-degree camera to display;

a server capable of recording and broadcasting the captured sub-events; and

one or more clients in network connection with said server that view portions of the captured event." (emphasis)

As discussed above neither Konopka nor Tai nor Taylor nor Ippolito teach the applicants' claimed **multiple cameras of different types simultaneously capturing images of sub-events occurring in a space associated with an event; or a virtual director that determines which view of the multiple cameras of different types to display based on the positioning of a speaker and the ability to track a speaker in captured images, and switches between the multiple cameras of different types to display a view of one of the different sub-events.**

Liu teaches a method and apparatus for providing multi-resolution video to multiple users under hybrid human and automatic control. Initial environment and close-up images are captured using a first camera and a PTZ camera. The initial images are then stored in memory. Current environment and close-up images are captured and then an estimated difference between the initial and current images and the true image is determined. The estimated differences are weighted and compared and the stored images are updated. A close-up image is then provided to each user of the system. The close-up camera is then directed to a portion of the environment image having high distortion, and current environment and close-up images are captured again. (Abstract) However, Liu does not teach the applicants' claimed **multiple cameras of different types simultaneously capturing images of sub-events occurring in a space associated with an event; or virtual director that automatically determines which view of the multiple cameras of different types to display based on the positioning of a person speaking and the ability to track the speaker in images captured by the cameras and the associated audio of the person speaking, and automatically switches between the multiple cameras of different types to display a view of one of the different sub-events**.

Since neither Konopka nor Tai nor Taylor nor Ippolito nor Liu teaches the applicants' claimed **multiple cameras of different types simultaneously capturing images of sub-events occurring in a space associated with an event where virtual director that automatically determines which view of the multiple cameras of different types to display based on the positioning of a person speaking and the ability to track the speaker in images captured by the cameras and the associated audio of the person speaking, and automatically switches between the multiple cameras of different types to display a view of one of the different sub-events**, the combination does not teach it. Thus, the applicants have claimed elements not taught in the cited art and which have advantages not recognized therein. Accordingly, no prima facie case of obviousness has been established in accordance with the holding of *In Re Fine*.

This lack of prima facie showing of obviousness means that the rejected claims are patentable under 35 USC 103 over Konopka in view of Tai, Ippolito,Taylor and Liu. It is, therefore, respectfully requested that the rejection of Claim 8 be reconsidered based on the above quoted claim language.

The 35 USC 103 Rejection of Claim 13.

Claim 13 was rejected under 35 USC 103(a) as being unpatentable over Konopka in view of Tai in view of Taylor and in further view of Rodriguez, Jr. et al., U.S. Patent No. 6,179,426 (herein after Rodriguez). The Examiner stated that Konopka, Tai and Taylor teach the applicants' claimed invention, but do not teach a projector for projecting images on a screen. However, the Examiner further contended that Rodriguez teaches this feature, rendering the applicants' claimed invention obvious. The applicants respectfully disagree with this contention of obviousness.

As discussed above neither Konopka, Tai nor Taylor teach the applicants' claimed **multiple cameras of different types simultaneously capturing images of sub-events occurring in a space associated with an event where virtual director that automatically determines which view of the multiple cameras of different types to display based on the positioning of a person speaking and the ability to track the speaker in images captured by the cameras and the associated audio of the person speaking, and automatically switches between the multiple cameras of different types to display a view of one of the different sub-events. Rodrigues also does not teach these claimed features.**

Since neither Konopka, Tai, Taylor nor Rodriguez teaches the applicants' claimed **multiple cameras of different types simultaneously capturing images of sub-events occurring in a space associated with an event; or virtual director that automatically determines which view of the multiple cameras of different types to display based on the positioning of a person speaking and the ability to track the speaker in images captured by the cameras and the associated**

audio of the person speaking, and automatically switches between the multiple cameras of different types to display a view of one of the different sub-events, the combination does not teach it. Thus, the applicants have claimed elements not taught in the cited art and which have advantages not recognized therein. Accordingly, no prima facie case of obviousness has been established in accordance with the holding of *In Re Fine*. This lack of prima facie showing of obviousness means that the rejected claims are patentable under 35 USC 103 over Konopka in view of Tai, Taylor and Rodriguez . It is, therefore, respectfully requested that the rejection of Claim 13 be reconsidered based on the above quoted claim language.

The 35 USC 103 Rejection of Claims 51-54.

Claims 51-54 were rejected under 35 USC 103(a) as being unpatentable over Konopka, in view of Tai, Taylor, Ippolito and in further view of Rodriguez, Jr. et al., U.S. Patent No. 6,179,426 (herein after Rodriguez). The Examiner stated that Konopka, Tai, Taylor and Ippolito teach the applicants' claimed invention, but do not teach the same types of cameras, in particular a whiteboard camera. However, the Examiner further contended that Rodriguez teaches this feature, rendering the applicants' claimed invention obvious. The applicants respectfully disagree with this contention of obviousness.

> The applicants claim
> "A system for conducting a distributed meeting, the system comprising:
> a 360-degree camera for capturing images of meeting participants in a meeting in substantially 360 degrees about said 360-degree camera;
> a whiteboard camera for capturing images of contents written on a whiteboard;
> a presenter camera for capturing images of an overview of the meeting room in the area where a presenter would typically be presenting;
> a microphone array for capturing the audio of the meeting that is synchronized with one of said images captured by said 360-degree camera, whiteboard camera or presenter camera; and
> a virtual director that automatically determines which view of said 360 degree camera, whiteboard camera or presenter camera to display and switches to the determined view of the associated camera to display a view of

one of said different sub-events, wherein said virtual director determines which camera view to display by:

determining if a person is talking and the presenter view camera can track them and provide a higher resolution image than the 360-degree camera, and if so using a camera view captured by said presenter view camera for display; and

else, using a camera view captured by said 360-degree camera to display; and

a meeting server for performing processing required to broadcast and record meeting data."

As discussed above neither Konopka nor Taylor nor Ippolito teach the applicants' claimed multiple cameras of different types simultaneously capturing images of sub-events occurring in a space associated with an event where **virtual director that automatically determines which view of the multiple cameras of different types to display based on the positioning of a person speaking and the ability to track the speaker in images captured by the cameras, and the associated audio of the person speaking, and automatically switches between the multiple cameras of different types to display a view of one of the different sub-events**. Rodriguez also does not teach these claimed features.

Since neither Konopka, Tai, Taylor, Ippolito nor Rodriguez teaches the applicants' claimed multiple cameras of different types simultaneously capturing images of sub-events occurring in a space associated with an event with virtual director that automatically determines which view of the multiple cameras of different types to display based on the positioning of a person speaking and the ability to track the speaker in images captured by the cameras and the associated audio of the person speaking, and automatically switches between the multiple cameras of different types to display a view of one of the different sub-events, the combination does not teach it. Thus, the applicants have claimed elements not taught in the cited art and which have advantages not recognized therein. Accordingly, no prima facie case of obviousness has been established in accordance with the holding of *In Re Fine*. This lack of prima facie showing of obviousness means that the rejected claims are patentable under 35 USC 103 over Konopka in view of Tai, Taylor, Ippolito and Rodriguez . It is, therefore, respectfully requested that the rejection of Claims 51-54 be reconsidered based on the above quoted claim language.

The 35 USC 103 Rejection of Claim 18.

Claim 18 was rejected under 35 USC 103(a) as being unpatentable over Konopka in view of Tai, in view of Taylor and in further view of Tosaya, U.S. Patent No. 6,549,230 (herein after Tosaya). The Examiner stated that Konopka, Tai and Taylor teach the applicants' claimed invention, but do not teach an event kiosk that is located on one of multiple cameras. However, the Examiner further contended that Tosaya teaches this feature, rendering the applicants' claimed invention obvious. The applicants respectfully disagree with this contention of obviousness.

As discussed above neither Konopka nor Taylor teach the applicants' claimed multiple cameras of different types simultaneously capturing images of sub-events occurring in a space associated with an event where virtual director that automatically determines which view of the multiple cameras of different types to display based on the positioning of a person speaking and the ability to track the speaker in images captured by the cameras and the associated audio of the person speaking, and automatically switches between the multiple cameras of different types to display a view of one of the different sub-events. Tosaya also does not teach these claimed features.

Since neither Konopka, Tai, Taylor nor Tosaya teaches the applicants' claimed **multiple cameras of different types simultaneously capturing images of sub-events occurring in a space associated with an event where virtual director that automatically determines which view of the multiple cameras of different types to display based on the positioning of a person speaking and the ability to track the speaker in images captured by the cameras and the associated audio of the person speaking, and automatically switches between the multiple cameras of different types to display a view of one of the different sub-events**, the combination does not teach it. Thus, the applicants have claimed elements not taught in the cited art and which have advantages not recognized

therein. Accordingly, no prima facie case of obviousness has been established in accordance with the holding of *In Re Fine*. This lack of prima facie showing of obviousness means that the rejected claims are patentable under 35 USC 103 over Konopka in view of Tai, Taylor and Tosaya . It is, therefore, respectfully requested that the rejection of Claim 18 be reconsidered based on the above-quoted claim language.

The 35 USC 103 Rejection of Claims 69, 71 and 72

Claims 69, 71 and 72 were rejected under 35 USC 103(a) as being unpatentable over Konopka, in view of Taylor, in view of Ippolito and in view of Rodriguez in further view of Tosaya. The Examiner stated that Konopka, Taylor, Ippolito and Rodriguez teach the applicants' claimed invention, but do not teach a 360-degree camera that includes an integrated computer that performs processing required to broadcast images and associated meeting data. However, the Examiner further contended that Tosaya teaches this feature, rendering the applicants' claimed invention obvious. The applicants respectfully disagree with this contention of obviousness.

As discussed above neither Konopka nor Taylor nor Ippolito nor Rodriguez teach the applicants' claimed **multiple cameras of different types simultaneously capturing images of sub-events occurring in a space associated with an event where virtual director that automatically determines which view of the multiple cameras of different types to display based on the positioning of a person speaking and the ability to track the speaker in images captured by the cameras and the associated audio of the person speaking, and automatically switches between the multiple cameras of different types to display a view of one of the different sub-events**.

Tosaya teaches a portable video conference module supporting a network-based video conference comprising a processor, a video camera, and audio input device and several interfaces coupled to the processor. The processor includes a local instruction processor accessing a local non-volatile memory. The interfaces

include a wireless data capture interface, a video display interface, an audio output interface and a network interface. But Tosaya does not teach the applicants' claimed **multiple cameras of different types simultaneously capturing images of sub-events occurring in a space associated with an event where a virtual director automatically determines which of the multiple cameras of different types to display based on the positioning and tracking of a speaker, and switches between the multiple cameras of different types to display a view of one of the different sub-events. Tosaya also does not teach these claimed features.**

Since neither Konopka, Tai, Taylor, Ippolito nor Tosaya teaches the applicants' claimed **multiple cameras of different types simultaneously capturing images of sub-events occurring in a space associated with an event where a virtual director automatically determines which of the multiple cameras of different types to display based on the positioning and tracking of a speaker, and switches between the multiple cameras of different types to display a view of one of the different sub-events,** the combination does not teach it. Thus, the applicants have claimed elements not taught in the cited art and which have advantages not recognized therein. Accordingly, no prima facie case of obviousness has been established in accordance with the holding of *In Re Fine*. This lack of prima facie showing of obviousness means that the rejected claims are patentable under 35 USC 103 over Konopka, Tai, Taylor, Ippolito and Rodriguez, in view of Tosaya. It is, therefore, respectfully requested that the rejection of Claims 69, 71 and 72 be reconsidered based on the above-quoted claim language.

In summary, it is believed that the claims 1-6, 8-21, 51-61 and 69, 71-72 are in condition for allowance. Allowance of these claims at an early date is courteously solicited.

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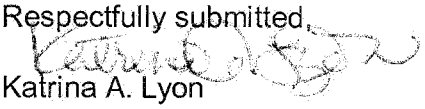
Respectfully submitted,



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